

withdrawn for the following reasons. Bigus does not teach each and every element of the subject invention as recited in the subject claims.

For a prior art reference to anticipate, 35 U.S.C. §102 requires that “each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999) (quoting *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)).

“To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.’” *Id.* (quoting *Continental Can co. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991)).

“Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *Mehl/Biophile Int’l Corp. v. Milgram*, 192 F.3d 1362, 1365, 52 USPQ2d 1303, 1305 (Fed. Cir. 1999), reh’g denied, 1999 U.S. App. LEXIS 31386 (Fed. Cir. Oct. 27, 1999) (quoting *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981)).

“In addition, the reference must be enabling and describe the applicant’s claimed invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention.” *In re Paulsen*, 30 F.3d 1475, 1479, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994).

The subject invention as claimed relates to a system that includes a translator component that translates synchronous rule statements into asynchronous rules statements using a synchronous programming model that facilitates concurrent processing of instruction in a runtime engine. These instructions yield statements that facilitate calling utility functions and yielding to code execution switching of the runtime engine. Furthermore, the runtime engine schedules according to polling. In order to support polling the translated function maintains a stack of polling structures. The stack allows for nesting polls within a single function. In order to configure for polling, a polling structure is setup at the top of the stack. Specifically, claim 1 recites a system embodied on a computer readable storage medium that when executed on one or more processors facilitate processing rules, comprising a translator component that translates

synchronous statements to asynchronous instructions using a synchronous programming model and a runtime engine that reads the translated instructions and facilitates efficient scheduling and parallel processing of the translated instructions; in which the instructions facilitate at least one of yielding to runtime rule code execution switching and calling a utility function, and in which the translated instructions are scheduled for processing based upon a polling structure, which processing occurs for at least one of the polling structure of a current frame and the polling structure at the tops of a stack. Further, independent claims 17, 29, 37, and 40 recite one or more similar features as claim 1 in various forms, including at least a component or method act that provides or translates instructions for processing based upon a polling structure, which processing occurs for at least one of the polling structure of a current frame and the polling structure at the tops of a stack.

Bigus does not teach or suggest the aforementioned novel features as recited in the subject claims. The cited reference discloses a computer program product for implementing a rule based programming language supporting a plurality of rulesets, an object-oriented framework that compiles the rulesets into a collection of framework objects, and plurality of pluggable inference engines for processing the collection of objects. Furthermore, depending on the inference engine used by the rule block, the rules can be processed sequentially or selected to be fired based on priority, specificity, or some other criterion. In addition, rules can be written that invoke other rule blocks, allowing rules to be partitioned within a single ruleset and multiple inferencing strategies to be employed. Other rulesets can be invoked from a rule, thereby allowing for complex rule based applications to be built using separate rulesets as the building blocks. These rules can also call out to arbitrary Java methods to receive values and invoke actions. However, Bigus is silent as to computer-readable medium having computer-executable instructions that facilitate at least one of yielding to runtime rule code execution switching and calling a utility function, and in which the translated instructions are scheduled for processing based upon a polling structure, which processing occurs for at least one of the polling structure of a current frame and the polling structure at the tops of a stack.

Also, in the cited reference, a ruleset provides support for processing events either synchronously or asynchronously. Nevertheless, Bigus fails teach a translator component that translates synchronous statements to asynchronous instruction using a synchronous programming model.

In view of the forgoing, applicants' representative respectfully submits that Bigus fails to teach or suggest all the features of independent claims, 1, 17, 29, 37 and 40 (and claims 2-5, 7-16, 18-19, and 30-34 and 36, and 38-39 that depend there from), and hence fails to anticipate the subject claims. Accordingly, withdrawal of this rejection is respectfully requested.

III. Rejection of Claims 20-28 Under 35 U.S.C. §103(a)

Claims 20-28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bigus (2004/0083454) in view of Yadav (2004/00111638). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Bigus and Yadav alone or combination do not teach each and every element of the applicant's invention as recited in the subject claims.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The subject invention as claimed relates to a system that includes a translator component that translates synchronous rule statements into asynchronous rules statements using a synchronous programming model that facilitates concurrent processing of instruction in a runtime engine. These instructions yield statements that facilitate calling utility functions and yielding to code execution switching of the runtime engine. Furthermore, the runtime engine schedules according to polling. In order to support polling the translated function maintains a stack of polling structures. The stack allows for nesting polls within a single function. In order to configure for polling, a polling structure is setup at the top of the stack. In particular, claim 20 states, *a system embodied on a computer readable storage medium that when executed on one or more processors facilitates processing rules in a model-based management architecture, comprising a plurality of rules that express health criteria for the architecture; a translator component that translates the rules into asynchronous instructions for concurrent processing; and a runtime engine that schedules the translated instruction for processing and processes some or all of the instructions concurrently according to the schedule, wherein the runtime engine schedules execution of an execution stack based on a polling structure for the current frame and the polling structure that is at the top of the execution stack.*

As conceded in the office action, Bigus does not teach or suggest the aforementioned novel features of applicants' claimed invention as recited the subject claims. The cited reference teaches a computer program product for implementing a rule based programming language supporting a plurality of rulesets, an object-oriented framework that compiles the rulesets into a collection of framework objects, and plurality of pluggable inference engines for processing the collection of objects. Also, the ruleset bean provides a plurality of application programming interfaces for exercising the functions provide by objects. The application programming interfaces include a rule language text parser, which in turn uses a rule language text grammar and rule language XML parser that makes use of rule language XML schema. These rulesets provide support for processing events either synchronously or asynchronously. Nevertheless, the Bigus does not teach a plurality of rules that express health criteria, nor a runtime engine that operate according to one of the instructions that suspends processing of code and waits for an event to occur, in response to which processing of the code is resumed and allowed to act on the event. Yadav is cited to make up for the deficiencies in Bigus. However, Yadav only discloses a plurality of rules that express health criteria. Both references are silent regarding the runtime engine that schedules execution of an execution stack based on a polling structure for the current frame and the polling structure that is at the top of the execution stack.

Therefore, Bigus and Yadav fail to teach singularly or in combination suggest each and every feature of independent claim 20 (and claims 21-22 and 24-28 that depend there from). Hence, it is respectfully requested that this rejection be withdrawn.

IV. Rejection of Claims 32, 33 and 35 Under 35 U.S.C. §103(a)

Claims 32, 33 and 35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Bigus (2004/0083454). Withdrawal of these rejections is respectfully requested for at least the following reasons. Claim 35 is cancelled with this Reply. Further, claims 32, and 33 depend from independent claim 29 for which a withdrawal is requested for the reasons as stated above.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP519US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution; the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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